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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/602,766	06/25/2003	Gerhard Petri	002918.00020	2297
22907	7590	12/20/2004	EXAMINER	
BANNER & WITCOFF 1001 G STREET N W SUITE 1100 WASHINGTON, DC 20001			PHUNKULH, BOB A	
			ART UNIT	PAPER NUMBER
			2661	

DATE MAILED: 12/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/602,766

Applicant(s)

PETRI ET AL.

Examiner

Bob A. Phunkulh

Art Unit

2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8, 18-23, 36, 37, 39, 40 and 42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 18-23, 36, 37, 39, 40 and 42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☒ Certified copies of the priority documents have been received in Application No. 08/984,324.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>6/25/2003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-8, 18-23, 36-37, 39-40, 42, are rejected under 35 U.S.C. 102(b) as being anticipated by *Knudsen* (US 5,448,621).

Regarding claim 1, *Knudsen* discloses a method of controlling transmission of a plurality of frequency channels, each of which has a frame format of substantially a same constant frame period, comprising:

controlling a timing of transmission of a plurality of frames of each of the frequency channels (*figure 3 shows a plurality channels F1-FQ*), wherein each of the frames comprises a transmission burst of variable duration and an interval between bursts of variable duration, such that a start of the transmission burst of each of the frequency channels differs from a start of the transmission burst of other ones of the frequency channels, wherein the plurality of frequency channels are transmitted by a common transmitter (the satellite apparatus controls a timing of the transmission of the F1-FQ, **see figs. 3 and 5, and col. 8 lines 12-26**).

Regarding claim 2, *Knudsen* discloses a start timing of the transmission burst of each of the frequency channel is different from that of others of the frequency channels (figure 3 shows the start of each frequency channels is offset by one time slot).

Regarding claim 3, *Knudsen* discloses a method of controlling transmission of a plurality of frequency channels, each of which has a frame format of substantially a same constant frame period, comprising:

controlling a timing of transmission of a plurality of frames of each of the frequency channels (*figure 3 shows a plurality channels F1-FQ*) such that a start of the transmission burst of each of the frequency channels differs from a start of the transmission burst of other ones of the frequency channels, the method further comprising controlling a transmission of a control channel including a plurality of sets of channel control data each relating to a corresponding one of the plurality of frequency channels such that set of control data are transmitted sequentially and an order of starting of the frames of the frequency channels substantially corresponds to an order of transmission of the set of the channel control data (the satellite apparatus controls a timing of the transmission of the F1-FQ, and some time slots or frequencies are usually reserved for access signaling and/or control, and are not ordinarily available for conventional conversations, **see figs. 3 and 5, col. 7 lines 43-52; and col. 8 lines 12-26**).

Regarding claim 4, *Knudsen* discloses the plurality of frequency channels are message traffic channels carrying one or more messages for selective message receivers (see col. 11 lines 41-49).

Regarding claim 5, *Knudsen* discloses an apparatus for controlling the transmission of a plurality of frequency channels, each of which has a frame format of substantially the same constant frame period, comprising:

a common transmitter for transmitting a plurality of frames in the frame format in the plurality of frequency channels; and

a controller for controlling a timing of transmission of the frames of each of the frequency channel, wherein each frame comprises a transmission burst of variable duration and an interval between bursts of variable duration such that a start of the transmission burst of each of the frequency channels differs from a start of the transmission burst of other ones of the frequency channel, wherein

the controller is arranged to control the common transmitter for transmitting the plurality of frequency channels (see figure 3 and 5, and col. **col. 7 lines 43-52; and col. 8 lines 12-26**).

Regarding claim 6, *Knudsen* discloses a start timing of the transmission burst of each of the frequency channel is different from that of others of the frequency channels (figure 3 shows the start of each frequency channels is offset by one time slot).

Regarding claim 7, *Knudsen* disclose an apparatus for controlling the transmission of a plurality of frequency channels, each of which has a frame format of substantially a same constant frame period, comprising:

means for controlling the timing of transmission of said frequency channels such that the start timing of a plurality of frames of each of said frequency channels differs from that of the other ones of said frequency channels, the apparatus further comprising means for controlling the transmission of a control channel including a plurality of sets of channel control data each relating to a corresponding one of said plurality of frequency channels such that said sets are transmitted sequentially and an order of starting of said frames of said frequency channels substantially corresponds to an order of transmission of said sets of said channel control data (see figure 3 and 5, and col. **col. 7 lines 43-52; and col. 8 lines 12-26**).

Regarding claim 8, *Knudsen* discloses the plurality of frequency channels are message traffic channels carrying one or more messages for selective message receivers (see col. 11 lines 41-49).

Regarding 18. *Knudsen* discloses the steps of controlling transmission of said frequency channels comprises transmitting signals to a relay station such that the relay station transmits said frequency channels with corresponding timing relationships (the satellite 5 is a relay station, see figure 5 and figure 3).

Regarding 19, *Knudsen* discloses the steps of controlling transmission of said channels include transmitting said channels.

Regarding 20, *Knudsen* discloses means for controlling transmission of said channels includes means for transmitting signals to a relay station such that the relay station transmits said channels with said corresponding timing relationships (the satellite 5 is a relay station, see figure 5 and figure 3).

Regarding 21, *Knudsen* discloses the Apparatus including means for transmitting said frequency channels (see figure 3 and 5).

Regarding 22, *Knudsen* discloses the apparatus is a satellite earth station (see figure 1 and 3).

Regarding 23, *Knudsen* discloses the apparatus is includes in A terrestrial base station (see figure 6).

Regarding claim 36, *Knudsen* discloses each frame comprises only one transmission burst and one interval of variable duration (each time slot can contain one message packet or can contain multiple message packets—thus each frame comprises a transmission burst of variable duration (see col. 7 lines 34-37).

Regarding claim 37, *Knudsen* discloses the transmission burst comprises a plurality of messages each containing a variable identity code identifying one or more terminals to which the respective message is addressed (each time slot can contain one message packet or can contain multiple message packets—thus each frame comprises a transmission burst of variable duration (see col. 7 lines 34-37). It should be note that a packet comprises of a header and a payload, where the header further comprises of at least source address, destination address, and other fields).

Regarding claim 38, *Knudsen* discloses the messages are transmitted continuously within the transmission burst (see col. 7 lines 34-37 and col. 9 line 28-32).

Regarding claim 39, *Knudsen* discloses each of the frames comprises only one transmission burst and one interval of variable duration (each time slot can contain one message packet or can contain multiple message packets—thus each frame comprises a transmission burst of variable duration (see col. 7 lines 34-37).

Regarding claim 40, *Knudsen* discloses the transmission burst comprises a plurality of messages each containing a variable identity code identifying one or more terminals to which the respective message is addressed (each time slot can contain one message packet or can contain multiple message packets—thus each frame comprises a transmission burst of variable duration (see col. 7 lines 34-37). It should be note that

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a packet comprises of a header and a payload, where the header further comprises of at least source address, destination address, and other fields).

Regarding claim 41, *Knudsen* discloses the messages are transmitted continuously within the transmission burst (see col. 7 lines 34-37 and col. 9 line 28-32).

Conclusion

Any response to this action should be mailed to:

The following address mail to be delivered by the United States Postal Service (USPS) only:

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P. O. Box 1450
Alexandria, VA 22313-1450

or faxed to:

(703) 872-9306, (for formal communications intended for entry)

Or:

The following address mail to be delivered by other delivery services (Federal Express (Fed Ex), UPS, DHL, Laser, Action, Purolater, Hand Delivery, etc.) as follow:

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220 20th Street South
Customer Window, Mail Stop _____
Crystal Plaza Two, Lobby, Room 1B03
Arlington, VA 22202.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Bob A. Phunkulh** whose telephone number is **(571) 272-3083**. The examiner can normally be reached on Monday-Tuesday from 8:00 A.M. to 5:00 P.M. (first week of the bi-week) and Monday-Friday (for second week of the bi-week).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's acting supervisor **Kenneth Vanderpuye**, can be reach on **(571) 272-3078**. The fax phone number for this group is **(703) 872-9306**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Bob A. Phunkulh



TC 2600

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December 09, 2004

BOB PHUNKULH
PRIMARY EXAMINER